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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,857	12/30/2003	Tim Allen	ALTRP108	6310
51501 7590 03/09/2007 BEYER WEAVER & THOMAS, LLP ATTN: ALTERA P.O. BOX 70250 OAKLAND, CA 94612-0250			EXAMINER CAO, CHUN	
			ART UNIT 2115	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			03/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/749,857

Applicant(s)

ALLEN, TIM

Examiner

Chun Cao

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-17,19-24 and 26-28 is/are rejected.
- 7) ☐ Claim(s) 2,18 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-28 are presented for examination.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/22/07 has been entered.
3. The text of those applicable section of Title 35, U.S. Code not included in this action can be found in the prior Office Action.
4. The rejections are respectfully maintained to the extended that is applicable to the amended claims and reproduced infra for applicant's convenience.
5. Claims 1, 3-17, 19-24 and 26-28 rejected under 35 U.S.C. 102(b) as being anticipated by Inaba et al. (Inaba), U.S. patent no. 4,396,987.

As per claim 1, Inaba discloses a system on a programmable chip [Numerical control device, fig. 3], the system comprising:

memory [col. 3, lines 13-16; col. 4, lines 17-22]; a processor [MPUN, fig. 3; col. 4, lines 22-23] couple to memory on the programmable chip, the processor operable to write streaming output information to memory [fig. 3; col. 4, lines 22-26];

a streaming output peripheral configured to generate clock cycle accurate output signals [pulses Xp and Zp; col. 4, lines 27-35], wherein the clock cycle accurate output signals are generated by reading streaming output information from memory and outputting signals based on the streaming output information [col. 3, lines 42-47; col. 5, lines 33-50].

As per claim 3, Inaba discloses streaming output information includes amplitude and timing information [col. 4, lines 27-37; col. 5, lines 33-50; col. 6, lines 29-35].

As per claim 4, Inaba discloses the streaming output information comprises a sequence of values written to memory [col. 5, lines 33-50].

As per claim 5, Inaba inherently discloses the sequence of values is associated with a periodic waveform [col. 5, lines 33-50].

As per claim 6, Inaba inherently discloses the sequence of values is associated with an event driven waveform [col. 4, lines 27-37; col. 5, lines 33-50; col. 6, lines 29-35].

As per claim 7, Inaba inherently discloses the sequence of values is associated with a scripted waveform [col. 4, lines 27-37; col. 5, lines 33-50; col. 6, lines 29-35].

As per claim 8, Inaba discloses the streaming output peripheral operates as a streaming parallel output [fig. 3; col. 4, lines 27-46].

As per claim 9, Inaba inherently discloses the streaming output peripheral operates as a digital to analog converter (DAC) [col. 5, lines 33-50].

As per claim 10, Inaba discloses the streaming output peripheral operates as a pulse width modulator [col. 9, lines 21-40].

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As per claim 11, Inaba inherently discloses the clock cycle accurate output values are generated during expected clock cycles [col. 4, lines 27-35].

As per claim 12, Inaba inherently discloses the clock cycle accurate output values form clock cycle accurate waveforms [col. 4, lines 27-35].

As per claim 13, Inaba discloses the clock cycle accurate waveform is generated without intervention from the processor [col. 6, lines 29-50].

As per claim 14, Inaba discloses the streaming output peripheral receives address information from the processor indicating where to read streaming output information [col. 5, lines 35-50].

As per claim 15, Inaba discloses the address information comprises one or more memory addresses [col. 5, lines 35-50; col. 6, lines 29-50].

As per claim 16, Inaba discloses the memory, processor, and streaming output peripheral are connected using simultaneous multiple primary component fabric [fig. 3; col. 4, lines 17-30].

As to claims 17 and 19-23, Claims 1 and 3-16 basically are the corresponding elements that are carried out the method of operating steps in claims 17 and 19-23. Accordingly, claims 17 and 19-23 are rejected for the same reason as set forth in claims 1 and 3-16.

As per claims 24 and 26-28 are written in mean plus function and contained the same limitations as claims 1 and 3-16. Therefore, same rejection is applied.

6. Applicant's arguments filed 2/22/2007 have been fully considered but are not persuasive.

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7. In the remarks, applicants argued in substance that in **Inaba** system, there is not a programmable chip.

8. The examiner respectfully traverses. A programmable chip is a programmable integrated circuit as a device, such that Inaba discloses a programmable chip such as a numerical control device. Furthermore, applicant states making processor and a streaming output peripheral integrating in a programmable chip. However, MPEP 1244.04 V B states making integral is not a patentably distinct.

Allowable Subject Matter

9. Claims 2, 18 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao whose telephone number is 571-272-3664. The examiner can normally be reached on Monday-Friday from 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is 571-272-2100.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 7 2007

A handwritten signature in black ink, appearing to read 'chao', is positioned above the printed name and title.

CHUN CAO
PRIMARY EXAMINER